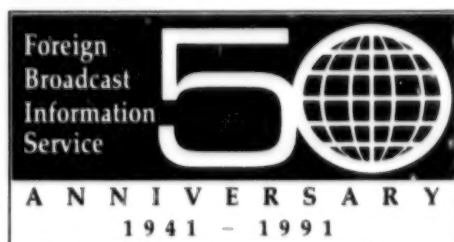


JPRS-TEP-91-009  
26 APRIL 1991



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# ***JPRS Report***

# **Epidemiology**

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# Epidemiology

JPRS-TEP-91-009

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## ANGOLA

### Huambo Vaccination Figures Given

91P40198A Luanda JORNAL DE ANGOLA  
in Portuguese 19 Feb 91 p 3

[Text] Huambo—Municipal health delegate Eltas Finde informed ANGOP [ANGOLAN PRESS AGENCY] that at least 80,000 pregnant women and newborn children were vaccinated in Huambo Province last year against tuberculosis (BCG) [Bacillus Calmette-Guerin] and measles. Eltas Finde considers the vaccination rate to be "very low" because patients do not regularly keep their appointments or have their prescriptions filled. This has led local health authorities to adopt other methods to safeguard public health and, therefore, the health sector and religious groups have embarked on a health awareness and vaccination campaign. The municipal health delegation has built 116 latrines and 258 sanitary pits to meet sanitation requirements.

### Doctor Reveals Child Mortality Figures, Causes

MB3104195791 Luanda Domestic Service in Portuguese  
1900 GMT 31 Mar 91

[Excerpt] Angola's infant mortality rate shows that, because of various diseases, one out of every five children will die before reaching the age of one year. This information was disclosed by Dr. Ana Paula, (who heads a program) [words indistinct] which tomorrow will complete the second year of its implementation in Luanda Province.

In a news conference with National Radio of Angola and JORNAL DE ANGOLA newsmen, Dr. Ana Paula noted that measles killed more than 3,000 children in Luanda last year alone. Of 700 recorded tetanus cases, 500 killed children under one year old.

Dr. Ana Paula said that the expanded vaccination program to infants and pregnant mothers must be further intensified to curb infant mortality. [Passage omitted]

### Newspaper Reports Measles Killed 3,000 Children in 1990

MB0604054291 Luanda ANGOP in French 1957 GMT  
5 Apr 91

[Text] Luanda, 4 Apr (ANGOP)—Quoting an official responsible for the vaccination program in Luanda Province, the JORNAL DE ANGOLA newspaper reports that 200 out of every 1,000 children in the province die before turning five. He blamed this high child mortality rate on the poor running of health posts, the bad state of cold storage equipment for preserving vaccines, and a lack of health education.

The JORNAL DE ANGOLA newspaper cites as examples the fact that measles killed 3,000 and tetanus 500 children who died within less than one year.

## BURUNDI

### Malaria Epidemic Kills 73

AB0304224591 Paris AFP in English 2123 GMT  
2 Apr 91

[Text] Bujumbura, April 2 (AFP)—A malaria epidemic raging in northern Burundi for the past two months has killed 73 people, and 1,500 patients have been treated for the disease, the Health Ministry said here Tuesday.

The disease had spread through Kayanza, where the deaths occurred, and Ngozi in the north and Gitega and Karuzi in the centre, all regions served by the river Ruvubu, where mosquitoes were breeding in the valley.

## CAMEROON

### Number of Lepers Declines Steadily in 20 Years

91WE0274 Yaounde CAMEROON TRIBUNE  
in English 28 Jan 91 p 2

[Excerpt] The remarkable progress so far achieved in the fight against leprosy in Cameroon was revealed yesterday by several speakers during the 38th World Leprosy Day. Joseph Mbende, Minister of Public Health noted that in 1970, Cameroon had 55,000 leprosy patients.

This figure fell to 27,000 in 1980. In 1990, there was an encouraging drop—13,000. The Minister said efforts made nationwide to curb the spread of leprosy at its initial stages, accounted for this remarkable drop. "For us to achieve no leprosy for all by the year 2000, we must first of all count on ourselves before counting on developed countries for aid," the Minister told the crowd. [passage omitted]

## GABON

### Report Shows Over 6,000 Leprosy Cases

91WE0270A Libreville L'UNION in French  
26-27 Jan 91 p 4

[Article by Elie Ngoungourou: "Showing Broad Solidarity"]

[Excerpts] Following the example of the international community, Gabon is celebrating the Third International Lepers' Day this Sunday, 27 January. Created in 1953 by the late Raoul Follereau, a journalist and writer who devoted his life to leprosy, the day aims to show that leprosy is an illness like any other, and to give lepers not only material assistance, but the joy of feeling that they are full-fledged citizens who are an integral part of society. [passages omitted]

Leprosy still afflicts 15 million patients in the world. A recent investigation showed that there are still nearly

6,000 lepers in Gabon, 3,000 of whom have been identified and are being treated. Efforts have produced tangible results, since in 1965, 10,895 lepers were counted, or over 2 percent of the population, compared to 0.5 percent now. The cure rate has jumped from 1.36 percent in 1987 to over 60 percent during the last few years. These more than encouraging results prove that the government's efforts to combat the scourge are unflagging.

## MALI

### Belgian Doctors Allowed in Country

AB2503111991 Paris AFP in English 1017 GMT  
25 Mar 91

[Text] Brussels, March 25 (AFP)—The authorities in Mali have allowed two Belgian doctors to enter the country after blocking them at Bumaki airport on Saturday, a European Community (EC) spokesman said here Monday.

The doctors, of the humanitarian organisation Medecins Sans Frontiers (Doctors Without Borders), had attempted to enter the country during political violence in which over 150 people have been reported killed since Friday.

A spokesman for the EC's executive commission, which financed the medical team, said the commission had expressed its concern to the Malian authorities over the initial refusal to admit the doctors. He blamed "a problem of coordination with Mali ministers". The commission decided on Friday to send the doctors, accompanied by 300 kilograms (660 pounds) of medical equipment, to treat the victims of clashes between government troops and anti-government demonstrators.

Doctors in Mali have reported shortages of medical equipment, blood, anti-tetanus serum and AIDS testing equipment.

### Measles Epidemic Reported in Bamako

AB0704190891 Bamako Domestic Service in French  
1300 GMT 6 Apr 91

[Excerpt] There has been an epidemic of measles in Bamako for several weeks now. To find out more about this outbreak of measles, our reporter Ismael Maiga talked to Dr. Sidibe Aissa Taba, the regional health and social affairs director for Bamako District. She touched on the reasons for this epidemic and the measures that must be taken to prevent it:

**Taba:** This measles epidemic, which has been raging for some weeks now, is due to insufficient anti-measles vaccination coverage in the Bamako District. Indeed, before we are able to contain this measles epidemic, 80 percent of the population should be vaccinated. Then we can handle other relatively minor cases.

**Maiga:** Dr. Taba, it appears the anti-measles campaign has been shelved because of the expanded vaccination program. Now what is the problem? Is it the effectiveness of the vaccine itself or something else?

**Taba:** The problem is not the effectiveness of the vaccine itself. There are several causes. I can mention for example the attitude of the people themselves. In my view, the anti-measles vaccination coverage depends primarily on the attitude of parents, because the vaccination must be seen as an indispensable tool for a child's life. So it is the duty of the parents—the father and in particular the mother—to ensure that their children are vaccinated against measles. [passage omitted] [end recording]

## MOZAMBIQUE

### Cholera Kills Six on Maputo's Inhaca Isle

MB2203125891 Maputo Domestic Service in Portuguese  
1030 GMT 22 Mar 91

[Excerpt] Eight confirmed cholera cases were reported on Inhaca Isle in Maputo Province on 19 March. Six people, including adults and children have died so far.

Dr. Olivia Ferreira, director of Mavalane General Hospital, said she sees the outbreak of cholera on Inhaca Isle as alarming because six fatal cases were immediately reported. She added that the number of cases could rise. [passage omitted]

### Six Dead From Cholera in Beira

MB0504073591 Maputo Domestic Service in Portuguese  
1730 GMT 4 Apr 91

[Excerpt] Luis Garrafa, head of the Public Health Department for Sofala Province, and spokesman for the Cholera Combat Program, has revealed that cholera has killed six people since it reappeared in Beira city in March. He added that the outbreak is on the rise and there are already 270 confirmed positive cases, including 169 from Beira city, 32 from Dondo, and six [figures as heard] from Marromeu district. [passage omitted]

### Health Official Reports 500 Cholera Cases Since Jan 1990

MB0504074491 Maputo Domestic Service in Portuguese  
1730 GMT 4 Apr 91

[Text] Maputo City Health Director Joao Leopoldo reports that more than 500 cholera cases, including 270 fatal ones, have been recorded countrywide over the last 15 months.

Health Director Joao Leopoldo noted that Maputo's worst hit area has been Pescadores ward. The Health Ministry has launched, together with other hygiene institutions, a campaign to fight the epidemic.



### **Cholera Kills Two People in Nampula's Mujincual District**

*MB0804102491 Maputo Domestic Service in Portuguese 0700 GMT 8 Apr 91*

[Text] Eight cases of cholera, including two fatal ones, had been reported in Nampula Province's Mujincual District up to the beginning of the first quarter of this year. [Sentence as heard]

Work to combat the epidemic has not been very successful due to a lack of medicines. The colera epidemic in Mujincual broke out on Macupe Island, where there are many war-displaced people.

### **Rise in Tuberculosis, Leprosy in Inhambane**

*MB0204163691 Maputo Domestic Service in Portuguese 1030 GMT 2 Apr 91*

[Excerpt] Inhambane Provincial Health Director Deliberto Dengo has revealed that 766 new cases of leprosy and tuberculosis were registered in the province last year. Addressing a recent session of the Inhambane Provincial Government, Dengo did not present further details on the most affected districts. He said however that of the two diseases, most people suffer from tuberculosis in the province, pointing out that 727 new cases of the disease were registered in 1990. [passage omitted]

## **NAMIBIA**

### **'Unexpected Outbreak' of Bubonic Plague in North**

*MB23 3151091 Windhoek WINDHOEK OBSERVER in English 16 Mar 91 p 2*

[Unattributed report: "Bubonic Plague in the North"]

[Text] There has been an unexpected outbreak of Bubonic Plague in the northern parts of Namibia which is yet to be brought under control. Health teams are fighting the disease out in the veld by dusting the area with carba-dust and treating people who have been in contact with the disease.

This was said by Dr. N. Shivute from the Oshakati Hospital in an interview with the OBSERVER yesterday [15 Mar].

Dr. R. Krause at the Windhoek State Hospital confirmed the outbreak and told our reporter that 78 cases of the disease were reported during the last week of February and another 83 cases during the first week of March.

Dr. Shivute said the disease is endemic to the area, and usually occurs between August and November. This year however, it continued right through the summer months.

"It is believed that the rodent population in the veld has largely decreased, which in turn cause the fleas to migrate—in this case from the veld into the populated areas. Once these infected fleas are inside a house, it is

very easy to contaminate those living there. They also inhabit other animals grazing in the veld, and jump onto humans when they get close enough," Shivute said.

He added that an unusually high number of Plague cases have been reported and that a full report on the situation is expected soon.

### **Bubonic Plague Kills 20 in Northern Region**

*MB0304202091 Windhoek TIMES OF NAMIBIA in English 25 Mar 91 pp 1, 2*

[Unattributed report: "Bubonic Plague in North"]

[Text] As 20 people have died of bubonic plague in northern Namibia since January, the Ministry of Health and Social Services has requested people to keep visits to other people's homes to a minimum, especially during the Easter weekend.

According to a statement released by the Ministry at the weekend, plague is endemic to some parts of Ovambo. However, it is unusual to find the disease occurring during the rainy season.

The disease, which has claimed the lives of 20 people since January, has been identified in Ongha, Ohalushu, Onandova, Onyaanya and Oshitayi. During January, 179 people contracted the disease, during February 194 and between 1 and 18 March, 166.

Spraying teams have been stationed at Oshakati, Onandjokue and Engela and visits have been made to the homesteads in the surrounding areas. The local team of health inspectors has been strengthened by two senior health inspectors from Otjiwarongo. A WHO consultant familiar with the disease is in the region and has also joined the team.

Blood specimens drawn from affected patients have been sent to the South African Institute for Medical Research in Johannesburg in order to isolate the possible causative organisms. Health education and information is provided to people over the local radio transmitters.

### **Plague Outbreak in North Reported 'Under Control'**

*MB0604174091 Windhoek THE NAMIBIAN in English 3 Apr 91 p 1, 2*

[Report by Kate Burling: "Doctors Winning Battle Against Bubonic Plague"]

[Text] The outbreak of Bubonic Plague in the north, which has so far claimed 22 lives, appears to have been brought under control, according to regional health chief Dr. Nestor Shivute speaking from Oshakati Hospital yesterday.

During the first two weeks of March, 15 to 17 cases of plague, which is spread by mice and rat fleas, were reported every day. Over the last fortnight reports of the



killer disease have declined and since March 23, the daily average has dropped to about five. Only one case had been noted at the hospital during the course of yesterday.

"I honestly believe we have the plague under control now," said Shivute. "We are not only recording those cases admitted to the hospital but are asking everyone to come forward and report possible incidence. We think our figures are accurate."

The outbreak spread unexpectedly over the last few months to cover an area of about 80 kilometres. The worst affected villages were clustered along the main roads—places like Onyaanya, Onankali, Ohali, Omu-longa, Oshitayi, Onandova, Okatope and Ongha.

Contrary to common expectations of Bubonic Plague, this outbreak did not take hold of an urban settlement. In fact if it had occurred at somewhere like Oshakati, the death toll would probably have been lower, according to Shivute.

"The disease is easily treatable once a patient has been admitted to hospital," he said. "The problems is that it is a fast killer and needs to be recognised immediately. The fact that it broke out in the rural areas made it more difficult to bring under control."

He said a vigorous campaign against the plague had been responsible for stopping its spread. The Ministry of health had been active on many fronts. The first had been directed against the fleas themselves with carba dusting carried out in all infected areas. The insecticide is sprayed into the mouse and rat holes to kill off both vermin and fleas.

Those people who have been exposed to the plague have been given anti-plague prophylaxis and there has been a widespread information campaign about the disease.

"Six teams of health workers have been fighting the plague throughout the area giving people vital information about the way the disease is spread."

People are being told to keep food well wrapped and to keep their houses as clean as possible to discourage vermin. They are warned to check their houses for mouse and rat holes and to take garbage away from the living area and bury it.

Children, who have been some of the worst hit plague victims, are being told to keep away from the vermin and not to eat rats. "The children do catch and eat rats and we are trying to stop this," said Shivute.

And two very down-to-earth bits of advice seem to be working: get a cat and buy a mousetrap. The doctor said "every second house seems to have a cat now. Each new litter is already spoken for."

Ironically, the good rainy seasons last year which led to improved food supplies, also brought more vermin. "People had more food and perhaps there were more

scraps around. The rat and mouse populations increased dramatically and so did the risk of plague."

Though Bubonic Plague is endemic in the Ovambo region, the usual yearly incidence is between 50 and 100.

"This is the first time we have had over 200 reported cases," said Shivute.

## NIGERIA

### AFP Reports on Cholera in Kano

AB3103183891 Paris AFP in English 1559 GMT  
29 Mar 91

[Text] Lagos, March 29 (AFP)—Three hundred people have been killed by cholera in Nigeria's northern Kano state, press reports said here Friday, quoting Health Minister Olikoye Ransome-Kuti.

"There is the clear and present danger that it (the disease) could spread to the contiguous states", such as Katsina, Kaduna, Bauchi and Borno, the minister told a news conference here.

An unnamed international non-governmental organisation might soon join efforts with the ministry to curtail the epidemic, he also said.

The last major cholera epidemic in Nigeria in 1989 affected 10 states in the country, including Lagos. Five of these states reported between one and 150 cases, three reported between 151 and 300 cases, while the remaining two had more than 300.

## SENEGAL

### Hope for Leprosy Eradication by the Year 2000

91WE0235B Dakar LE SOLEIL in French  
11 Jan 91 p 7

[Excerpts from an article by A.J.B.: "An Illness Like Any Other"]

[Excerpts] The Dakar Regional Day that was organized 9 January in the CESAG (African Center for Advanced Management Studies) by ASAL (Senegalese Association for Social Action and Aid to Lepers) began with a medical update. Thanks to very clear medical strides, leprosy will disappear from Senegal by the year 2000. "There is no reason why we cannot achieve this goal by 1994-95," asserts Dr. Naudin of the DAHW (German Association for Aid to Lepers).

All active lepers will have gotten their PCT (polychemotherapy, a combination of antibiotics) treatment, and the medical corps believes that 1,500 cases in the whole country should still pose a problem three or four years from now. "But 1,500 cases for 7 million inhabitants is no longer an endemic disease, but an illness like any other."

Medically, this "illness like any other" affected 15,000 patients in 1981. In 1985, after the files were cleaned out, 10,000 patients were counted. The figure fell to 6,000 in 1989, "with 1,500 patients cured yearly" today.

This evident progress was brought about by a combination of causes, including the implementation of a radical treatment starting in 1980-81. [passages omitted]

As explained by Dr. Naudin, new treatments were instituted for care in each sector of [the department of] Large-Scale Endemic Diseases, starting in 1980. "The goal is to cure patients without mutilating them and to cure all the patients in the country." The treatments, which have progressed enormously, make it possible to treat in six or 12 months cases in which the patient [formerly] had to take medications for a time span ranging from 10 years to the rest of his life. These scientific strides also allow patients to get care starting with the very first effects, and to avoid all problems of nervous damage and subsequent mutilations. [passages omitted]

## SOUTH AFRICA

### Transkei Official Confirms Anthrax Outbreak

MB0604053191 Johannesburg SAPA in English  
2119 GMT 5 Apr 91

[Text] Queenstown Apr 5 SAPA—Following confirmed reports of anthrax in the Herschel District of the Transkei, authorities have warned people in the area not to eat meat from animals which have died suddenly.

The regional director of animal health services, Dr. Pikkie van der Vyver, said from Port Elizabeth on Friday [5 April] that although cattle were most susceptible to the disease, it was also found in sheep, goats and pigs.

People working with skins or wool of infected animals were likely to get abscesses while contaminated meat could cause death if eaten.

Dr. van der Vyver said anthrax, a bacterial disease which attacks the animal's spleen, was pathogenic and could lie dormant in the soil for decades until favourable conditions arrived.

He said warning symptoms were seldom seen. "Animals simply die very suddenly and often bleed from all orifices while the spleen becomes grossly enlarged."

Carcasses of animals suspected of dying from anthrax should be burnt and not handled under any circumstances. Because of the highly infectious nature of the disease it was diagnosed from blood samples rather than the usual post mortem procedure.

He confirmed the outbreak at Herschel had been positively identified by the state veterinarian in Umtata, following a number of sudden cattle deaths.

## SWAZILAND

### Health Officer Notes Typhoid, Diarrhea, Malaria Cases

MB1903210691 Mbabane Domestic Service in English  
1600 GMT 19 Mar 91

[Text] A health educational officer based at Siteki, Mr. Bongani Magongo, has disclosed that there are 90 positive cases of typhoid and one person reported to have died from the disease at Sithobela.

He said typhoid and diarrhea are reported at Sithobela and Lubulini where a borehole is suspected of having contaminated water. Mr. Magongo further said there is an increase of diarrhea amongst adults which is very unusual.

Members of the public seem to understand when they are being told how to prevent the spread of the disease.

### Malaria Kills 2 in January; 192 New Cases

MB0204211691 Mbabane Domestic Service in English  
1600 GMT 2 Apr 91

[Text] Malaria fever is once more on the rampage in Swaziland, having killed two young men last month. The head of the Malaria Control Unit, Mr. Simon Kunene, said the latest victim died at Ngwane Park, once considered a malaria-free area. The other was killed at Simunye.

Mr. Kunene asked Ngwane Park residents to be on the lookout for mosquitoes, saying Ngwane Park, like Gumdini and Nhlambeni, is now infested by this deadly disease. He announced an outbreak of the disease in northern Swaziland at Mvembili, Ndlambini, Dundisini, and Nhlambeni, mainly on the border with South Africa.

In all there were 192 positive cases of malaria in Swaziland last month, a decline of slightly more than 300 when compared with the corresponding period last year.

## UGANDA

### French TB Vaccine Withdrawn After Reactions

91WE0281A Kampala WEEKLY TOPIC in English  
8 Mar 91 pp 1, 16

[Text] About 200,000 doses of BCG vaccine for child immunisation against tuberculosis (TB) have been withdrawn after an unknown number of children country-wide had been vaccinated with it.

The vaccines were distributed to all hospitals at the beginning of last year. But after three months parents started complaining that their children were developing swelling nodes in the armpits. It was later in the year after a tide of complaints that 173,200 vaccines were recalled of the 1,558,800 doses. The whereabouts of

1,385,600 doses is not certain but it is likely that most of it has been used to immunise children.

The vaccines known as 'pasteur vaccine' were withdrawn September last year though WEEKLY TOPIC has only been able to get authorities to talk about it this week. According to the Uganda National Expanded Programme for Immunisation (UNEP) Manager, John Barenzi, "withdrawal started in September, 1990."

Public Health Department staff at Rubaga Hospital told WEEKLY TOPIC that children developed swellings of auxiliary glands after immunisation and "we stopped using the drug in August after three months of application," one said.

Medical officials in the country have not yet made a full scale assessment of clinical effects of the vaccine. But one nurse who heads a mission dispensary near Kampala was one of the parents whose son nearly died after the 12 months ordeal.

"My child experienced stunted growth in this period," she said. Her child developed diarrhoea and vomiting and "had symptoms pointing to T.B. of the stomach." She said that some medical personnel told her that the TB vaccine may have contained an active TB Bacteria. And that in most of the cases "children might have been given an overdose of the bacteria which over-reacted unlike the normal BCG which don't react."

"Normally the TB vaccine (BCG) contains a weakened TB bacteria and when injected in a child, the body produces anti-bodies and in this process, the bacteria dies, but in the particular vaccine, I was told the bacteria was very active," she said.

She claimed to have heard of children who died in the area as a result. "Even though my child is alive, the overall effects are still there," she said. There has been concern that the Vaccine may have blown holes in the country-wide immunisation programme. BCG Vaccination programme covers 90 percent of the country.

A total of 1,558,800 doses at a total cost of US\$4,528 were imported in late 1989 from Pasteur Institute in France. This was the first time such an importation was made from France.

Normally Uganda obtained TB vaccines from international laboratories from Japan, Yugoslavia and Canada. It is not known why Ministry of Health officials changed their traditional supplies.

Barenzi explained that this strain's "reaction was more violent." He said that it produced an abscess. It reacted within the nodes which ended up swelling in the armpits. He reported that though the swelling were "not dangerous," there were some serious cases. "In Aduk-Apac, the nodes were abnormally enlarged." He disagreed with reports that there could be fatal cases, saying that "the seriousness did not go beyond swelling." But that the degree of reacting depended on the child's circumstances.

"The degree of malnutrition, the prevalence of TB, and HIV complications all add to the degree of reaction," he said. Barenzi's explanation is that the vaccine was "just violently reactive, and highly stimulant in making antibodies than the normal one, but its effects do not cause any serious concern."

Other medical officials were circumspect and offered vague explanations and circumstances surrounding the vaccine but one senior nurse at Mulago children's ward said, "though I have not seen dead bodies here in Mulago, obviously in those areas (rural) where medical facilities are remote there is bound to be death."

Dr. Odor, chairman of the task force of BCG lymphadenitis said that he could not dismiss entirely the possibility of an active bacteria but was reserved on its effects. "We received alarming reports from Kampala that the vaccine was harmful. He added that he had not heard any reported cases of death. He offered another theory that the problem of the BCG vaccine could have been brought about by mishandling."

But other sources said that if there was a technical problem with handling, swellings would have occurred in the region where the vaccine was injected, not in the armpits. This disagreement among medical circles also extended to the time taken to withdraw the vaccine. Some doctors had called for the immediate withdrawal when the problems were first detected in the first three months of application but others preferred to give it more time to check the effects. Some doctors still don't see the need to destroy the vaccine. Dr. Odor said "we had no cause to destroy the vaccine, instead, we recalled it so that it could be stored." But Mr. Barenzi said "the vaccines will have to be disposed of."

The pasteur vaccine has not been successful wherever it was used. A host of other countries in Africa have had nasty experiences with the vaccine since 1985 when it first came on market. Kenya and Zimbabwe are the most recent victims. However, this was the first time a problem of such magnitude has happened in Uganda.

Dr. Odor has been appointed to chair a task force to investigate the effects of pasteur vaccine. "There is an impact study to assess the levels of acceptability of this BCG vaccine," he said. Meanwhile Dr. Karamagi of Mulago Hospital, paediatric department, said that he has been encouraging mothers to continue bringing their children for immunisation.

## ZAIRE

### Measles Epidemic in Kivu Region

AB2503142891 Paris AFP in English 1405 GMT  
25 Mar 91

[Text] Brussels, March 25 (AFP)—A measles epidemic has killed 500 people in the Kivu region of eastern Zaire, the ZAIRIAN NEWS AGENCY, AZAP said in a report monitored here Monday. AZAP, quoting medical

sources, said the epidemic was worst among members of the Balunga tribe living in Sabunda district. It did not say when the epidemic broke out.

A Zairian doctor told AZAP that nurses had been sent to the area to do what they could "with the resources at hand". He said 200 vaccine doses, 5,000 packets of salts for oral rehydration and 200 flasks of penicillin were ready to be transported to the stricken areas.

#### Almost 200 Dead From Measles

AB0204214791 Paris AFP in English 21/7 GMT  
2 Apr 91

[Text] Kinshasa, April 2 (AFP)—A measles epidemic which struck in eastern Zaire several weeks ago has killed almost 200 people, mostly infants, national radio reported in a new account which considerably lowered the previous official death toll. The state news agency AZAP had a week ago reported more than 500 deaths to the south of Kivu Province close to Rwanda. The radio said the spread of the epidemic was being stemmed thanks to vaccination teams sent from the capital.

### ZAMBIA

#### Cholera Kills 17 People in Mpika Area

MB3003191091 Lusaka Domestic Service in English  
[800 GMT] 30 Mar 91

[Text] The cholera death toll in Chief Nabwalwa's area has reached 17 since the disease broke out last month. Mpika District Governor Comrade Tenson Ziame made this disclosure but assured the public that the disease had been contained.

Comrade Ziame said the medical team sent to the area headed by the clinical officer, George Silume, had successfully accomplished their task and [words indistinct] today. Chief Nabwalwa's area is not accessible by road and all communication is by helicopter.

#### Medical Officials Comment on Cholera Outbreak

MB0404142291 Lusaka Domestic Service in English  
0500 GMT 4 Apr 91

[Text] The cholera epidemic which broke out in parts of Chamwana, Petauke, and Mwanza Districts a few months ago has now spread to Chama District where it is reported to have killed a number of people. According to reports reaching [words indistinct] the disease which was

first reported in Mumbalanga area of Chief Shombe has now spread to parts of Senior Chief Kavumbeni area where it is said to have claimed more lives.

Efforts to get the provincial medical officer, Dr. Lenny Kassomba [word indistinct] confirmation [words indistinct] senior officials at his office [words indistinct] confirmed the outbreak. He said a team of medical personnel from Chipata [words indistinct].

In Luapula Province, the cholera which broke out at the beginning of this year in [words indistinct] Kawamba Districts has been continuing. The Luapula Province [words indistinct] Comrade Bantu Kapoza said in [words indistinct] when he addressed a provincial council meeting. Comrade Kapoza noted that although Nchelengue District was experiencing a few cases of the epidemic, especially on the island, medical personnel was doing everything possible to contain the situation.

#### Cholera Deaths Since October at About 800

MB0704135591 Johannesburg International Service  
in English 1/000 GMT 7 Apr 91

[Text] The Zambian Minister of Health, Mr. Jeremiah Chinkwa, says cholera has killed almost 800 people since October in the worst outbreak of the disease in Zambia.

He said more than 10,000 cases have been reported among the population of about 8 million. Mr. Chinkwa said the cholera outbreak, which was caused by contaminated water and poor sanitation, had been brought under control with the end of the rainy season.

#### Cattle Die in Disease Outbreak in Central Province

MB0704134491 Lusaka Domestic Service in English  
[800 GMT] 5 Apr 91

[Text] The cattle lumpy skin disease, which was first reported in Central Province, has spread to Lusaka Rural where it is understood to have killed several animals while over 150 are suspected to have contracted the disease. Lusaka Rural Veterinary and Livestock Officer Gibson Chisulo confirmed the spread of the disease to the area today when two cattle died at the Mbana Vet Substation, five at Mutaminu, and three at Chinhanhu, while many farmers recorded some deaths.

He said symptoms include rise in temperature, loss of appetite, and signs of nasal discharge. Comrade Sisalo said transport problems had made it difficult for his staff to assess the impact of the disease in all catchment areas.

### Doctor Discovers New Type of Staphylococcus Aureus

OW3003093091 Beijing XINHUA in English  
0903 GMT 30 Mar 91

[Text] Beijing, March 30 (XINHUA)—A Chinese doctor has discovered a new type of staphylococcus aureus, according to today's "People's Daily."

When examining pathogenic bacteria for a patient in 1988, Sun Xiaopeng, who works at the No. 11 hospital for the troops of the People's Liberation Army stationed in Xinjiang Uygur Autonomous Region, came across a type of golden bacterium which had previously never been reported.

After careful studies, Sun concluded that the newly-discovered bacterium is a heterotype catalase negative staphylococcus aureus. This bacterium can cause many kinds of infectious diseases in human beings and animals, including wound purulent inflammation.

### Health Minister Announces New Strategy To Control Plague

HK0404034591 Beijing CHINA DAILY in English  
4 April 91 p 3

[By staff reporter Zhu Baoxia]

[Text] China is to tighten up its plague control strategy over the coming decade.

Chen Minzhang, minister of Public Health, made this announcement at a four-day national conference on plague control which opened in Beijing yesterday.

He said the Ministry of Public Health had just finished drafting its plague control strategy for the Eighth Five-Year Plan period (1991-95) and the Ten-Year Programme (1991-2000).

Presenting details of the draft outlines to conference delegates, he said the ministry aimed to halt the spread of the plague—which is caused by rats—by 1993, curb its reappearance by 1995 and reduce the number of cases of and deaths from the plague to the lowest level by the year 2000.

Chen said everyone should be on their guard to prevent the plague from spreading.

Ministry statistics showed that 201 counties and prefectures in 17 of the country's provinces and autonomous regions, covering a land area of more than 600,000 square kilometres, had been identified as plague danger zones.

Most were in the sparsely-populated northwestern and southwestern areas, Chen said.

A total of 108 cases of the plague and 18 deaths from the plague were reported in China between 1986 and 1990. This was 67 cases up on the figure for the previous five-year period, he said.

The minister, in his speech to the conference, called on local governments at all levels to tighten up their plague control programmes.

All local governments, he said, were being asked to include a plague control strategy in their daily agendas and to map out detailed work guidelines in order to train more staff up to the required standard and guarantee sufficient funds and material supplies. They were also being asked to undertake scientific research and to implement publicity and education programmes.

Chen also told delegates about the remarkable progress the country had made in the field of plague control in past years.

Nine provinces including Heilongjiang, Liaoning, Jilin and Hebei as well as some coastal areas in the south-eastern part of the country eradicated the disease 13 years ago, he said.

Most of the cases reported in the northwest and southwest of the country in recent years were in scattered areas, he said, and were tackled immediately. For this reason, the disease did not spread.

In the last five years, he said, 109 counties which had been classified as epidemic districts had wiped out or preliminarily eliminated the plague, accounting for 54.22 percent of the total.

Chen noted that a report entitled Discovery and Research into Natural Plague Epidemic Source Areas in China, which highlights the results of 30 years of investigations and research by Chinese medical scientists, won the State prize for natural science studies in 1987.

He also said that an inspection network had been established for the entire country. It aimed to pinpoint epidemics in good time and work out ways to curb the spread of the disease.

In addition, he said, three medical institutes had started training courses in plague control work for grassroots medical workers.

The Ministry of Finance had allocated 19 million yuan (\$3.6 million) to the national plague control programme over the last five years, he said.

### Aflatoxin Linked To Genetic Defect of Liver Cancer

OW0504014691 Beijing XINHUA in English  
0124 GMT 5 Apr 91

[Text] Washington, April 4 (XINHUA)—Scientists have linked to liver cancer a genetic defect apparently produced by aflatoxin in food, marking the first time an environmental culprit has been fingered for a cancer-causing genetic flaw.



In separate studies, two international research teams found that about half of 16 liver cancer patients from Qidong County, Jiangsu Province, China, and 10 liver cancer patients from southern Africa shared a common genetic defect on chromosome 17, according to today's issue of the journal NATURE.

The teams headed by Dr. Curtis Harris of the U.S. National Cancer Institute and Dr. Mehmet Ozturk of Massachusetts General Hospital said they found strong signs that the defect in liver cancer may be to exposure to aflatoxin B1, a poisonous factor made by molds that contaminate grains, peanuts and other foods.

The new findings should enable scientists to gain a better understanding of the underlying causes of liver cancer as well as bolster the view that environmental factors may play a key role in some types of cancer.

Besides sharing strikingly similar locations on chromosome 17, the genetic defects detected in the Chinese and African liver cancer patients "are consistent with mutations caused by aflatoxin B1" in animal experiments, said Dr. Harris and his colleagues from China's Cancer Institute and the University of Maryland School of Medicine.

In certain areas where aflatoxin contamination is widespread also have high rate of hepatitis B infection, another factor that has been implicated in liver cancer. Researchers said the hepatitis virus is unlikely to cause

the tiny, precisely focused genetic mutations seen in the liver cancer patients studied.

Most of those flaws were clustered at one tiny site on a known tumor suppressor gene—a gene that when healthy puts a brake on cell growth, but when defective enables runaway, cancerous growth to proceed unchecked.

Flaws in the gene, called P53, have been previously found in over half of breast, lung, colon and bladder tumors, but those genetic mistakes have been scattered along the length of the gene and not concentrated in one "hotspot" like that found in the liver tumors. Furthermore, the cause of the P53 mutations in those cancers is not known.

Each person has 23 pairs of chromosomes containing about 100,000 genes that bear the blueprints for everything from hair color to disease risk.

About 2 of every 1,000 people in the Qidong County of Jiangsu Province develop human hepatocellular carcinomas, the most common type of liver cancer and the form examined in the latest studies, Dr. Harris said.

To confirm that the P53 defect is indeed linked to aflatoxin B1, Dr. Harris and his colleagues are now screening liver tumors from people living in regions where there is little or no aflatoxin B1 to make sure they do not share similar genetic flaws.

## SOUTH KOREA

### Citizens, Consumer Groups Protest Water Pollution

SK2403032891 Seoul THE KOREA TIMES in English  
24 Mar 91 p 1

[Text] Public protests are spreading to the nation's major cities to condemn the Doosan Electro-Materials Co., a phenolic laminate manufacturing company, accused of polluting tap water sources.

Some consumers groups are boycotting all products manufactured by the Doosan Business Group and its subsidiaries including OB Beer and Coca-Cola.

Panic and outrage began when a Doosan factory in Kumi, Kyongsang-pukto, was held responsible for discharging 325 tons of phenol, a cancercausing material, into the Nakdong River which supplies piped water to nearly 10 million people.

The collective movement was spearheaded by social organizations in Taegu, the nation's third largest city, where millions of citizens have suffered from offensive odor in tap water for nearly 10 days.

Seven organizations such as the Taegu branch office of the Citizens' Coalition for Economic Justice, YMCA and YWCA launched a joint protest rally at a downtown Catholic center yesterday to demand compensation and punishment against those responsible.

Before holding the rally at 6:30 p.m., members of the organizations gathered at a downtown street in front of the Taegu Department Store and marched some three kilometers to the Catholic Center.

The organizations called on citizens to refuse to pay tap water bills and boycott Doosan products.

They also vowed to launch a joint struggle until all problems concerning tap water are settled.

Some downtown pubs and stores already are joining the citizens' drive by removing OB Beer from their shelves.

Obstetric and gynecology clinics are receiving calls from pregnant women who are anxious about possible abnormalities of their unborn children.

A hospital official said that he had been called by three to five women daily asking about the influence of phenol on unborn infants. Accurate responses cannot be given due to a lack of research data, he said.

Meanwhile, representatives of 10 citizens' bodies in Seoul issued a statement after meeting at the YMCA building in downtown Seoul.

Criticizing the factory for discharging waste water containing phenol, the statement asked citizens not to buy Doosan products.

The civic groups planned to hold a hearing on the safety of tap water tomorrow by inviting Doosan Group officials, government officials and anti-pollution activists.

Massive boycotts of products manufactured by pollution-causing companies is regarded as a strong punishment against companies in a nation where such collective movement has not existed in the past.

Meanwhile, Doosan group chairman Pak Yong-kon pledged to donate 20 billion won to the Taegu city government, asking it to use the money to fight pollution.

Saying that the donation is meant to finance part of the cost for the restoration of the environmental damage, Pak added that his company is now studying ways to deal with compensation to deserving individuals.

### Prosecutors To Arrest Officials in Pollution Case

SK2403042891 Seoul THE KOREA HERALD  
in English 24 Mar 91 p 1

[Text] TAEGU—The prosecution, investigating the dumping of large amounts of phenol into the Nakdong River, plans to arrest at least seven government officials on charges of negligence or forging documents, prosecutors said yesterday.

The Taegu District Prosecutor's Office said five officials of Shinsong Co., the Kumi-based maker of copper-clad laminated sheet, were also under investigation on allegations that they dumped about 285 tons of untreated waste phenol into the river last year.

Six officials of Doosan Electro-Materials Co. were placed under arrest last Thursday on charges of discharging hundreds of tons of waste phenol into the river, which triggered tap water contamination in the city and other areas.

Prosecutors said seven staffers at the Taegu Environment Administration and two Taegu City officials in charge of water supply were questioned to determine their possible negligence and other wrongdoings.

They include Pak Nam-chae, Yi Sang-sok and Chu Kyo-chong, members of the pollution crackdown team of the district environmental agency.

An initial investigation showed that the government officials are alleged to have forged documents dealing with their clampdown activity on waste-emitting firms including Soosan Electro-Materials Co.

The prosecution seized the district environmental agency's records on pollution control, which state that Doosan's anti-pollution devices were in normal operations, even though the company confirmed that one of the two incinerator boilers broke down.

Prosecutors said they were trying to determine whether the officials took any bribes in the course of investigating Doosan.



The prosecution found evidence that Shinsong allegedly produced a total of 768 tons of phenol last year, but disposed of only 483 tons through incinerating. And the remaining 285 tons of waste phenol was discharged without treatment, prosecutors alleged.

The prosecution was also expanding its probe to include other phenol-discharging firms in Kumi and Kimchon, prosecutors said.

In a related development, a joint crackdown team, comprised of officials from the Environment Ministry, Taegu City and Kyongsangbuk-do, detected 15 plants discharging untreated toxic waste. The team conducted checks on a total of 136 firms located in the upper reaches of the Nakdong River.

Meanwhile, two officials of a chemical product firm were arrested yesterday on charges of dumping large amounts of untreated waste chemicals, contaminating tap water resources in Chochiwon and Uongi County in Chungchongnam-do in the past 15 days.

The two are Yu Chin-tae, president of Dongsung High Polymers Co., and Ko Tok-sun, the Nojang plant manager.

The prosecution said the two were also quizzed to determine whether they provided bribes to relevant officials in connection with permission to build the chemical product plant in the Nojang industrial estate, originally reserved for agricultural processing firms.

## LAOS

### Cuban Medical Unit, Treatment Assistance Noted

91WE0285B Vientiane VIENTIANE MAI in Lao  
29 Dec 90 pp 1,4

[Unattributed report: "The Opening of the Third Scientific Congress of the Cuban Medical Teams"]

[Text] The third scientific congress of the Cuban medical teams was officially opened yesterday morning in the auditorium of the medical college. Those participating included Professor Vannalet Lasapho, the Deputy Minister of Public Health, honored guests, and representatives of the Cuban medical teams stationed at the Setthathilat Hospital, the Sayaboury Province Hospital and the Luang Prabang Province Hospital. A large number of the medical college students joined in. Mr. Jose Manuel Kaksiatores, the Cuban Ambassador to the LPDR [Lao People's Democratic Republic] was also an honored participant.

The purpose of this congress was to exchange information and draw lessons concerning various diseases common to the LPDR in order to treat these diseases correctly according to scientific principles and in a manner appropriate for the conditions in each locality. In addition the congress will recommend methods for operating on pang [enlarged spleen due to chronic

malaria] and will review war wounds, the characteristics of malaria in Luang Prabang Province, intestinal parasites and roundworms which are spreading in Sayaboury Province, and a number of other items.

### Leprosy Work, Study in SRV

91WE0285A Vientiane VIENTIANE MAI in Lao  
9 Feb 91 p 1

[Unattributed report: "Care Provided for 166 Leprosy Patients"]

[Text] Medical cadres assigned to the skin disease branch affiliated with the Center for Disease Control of the Vientiane Municipal Public Health Service reported that in 1990 this branch had been able to care for 166 leprosy patients, had discovered 10 new leprosy patients, had distributed more than 2,700 pills to patients and had done a number of other things.

It was also reported that during the past year this branch had provided information about hygiene to the people of various villages surrounding the Vientiane Municipality on 27 occasions, and almost 1,400 people had attended the presentations. It was reported that in order to prevent the spread of leprosy in 1991 this branch had sent two more medical cadres to study in the SRV so that they could come back to check the people for this disease.

## TAIWAN

### Biomedical Engineer Invents Detector for Glaucoma

OW2303040991 Taipei CNA in English 0254 GMT  
23 Mar 91

[Text] Taipei, March 23 (CNA)—A Taiwan biomedical engineer announced Friday he had invented a low-cost device that can detect glaucoma easily and accurately in a little more than 10 minutes.

Called the "four-channel anomaloscope," the color sense abnormality detector has obtained patent in the Republic of China and the United States and is applying for patent in Japan, inventor Chang Yin told a press conference.

Chang is an associate professor at the Biomedical Engineering Department of National Yang-ming Medical College.

Conventional glaucoma detectors cost more than NT\$1 million (U.S. \$33,000) per unit and take at least one hour to examine each patient, Chang said. The new device will cost only a little more than NT\$100,000 and needs just a little more than 10 minutes for examination.

The lower cost and shorter examination time will make it easier to detect glaucoma cases in their early stages when the patients have a better chance of being cured, Chang said.

The later the disease is diagnosed and treated, the higher the risk the patients will become blind, he warned.

Citing foreign statistics, Chang said the risk of developing glaucoma for people under 40 is 0.002 percent. For those over 40 years of age, the risk climbs to more than one percent, and for those older than 70, as high as three percent.

### **Six Contagious Diseases Disappear**

*OW0604091791 Taipei CNA in English 0847 GMT  
6 Apr 91*

[Text] Taipei, April 6 (CNA)—Pest, yellow fever, and relapsing fever were stamped out as long ago as 1951, and three other contagious diseases have also disappeared or almost disappeared in Taiwan, according to the Taiwan provincial department of health.

The department said smallpox and rabies were wiped out in the Taiwan area in 1954 and 1958, and cholera has not caused any deaths since 1962.

Statistics released by the department show that there were 383 cases of cholera in 1962, which resulted in 24 deaths. A few people were stricken by the disease in 1982, but an epidemic did not develop.

In 1954, one of nine persons who had contracted smallpox died. The disease has not been reported since.

Rabies killed more than 100 people in Taiwan in 1952. Between 1953 and 1957, some 50 deaths from the disease were reported annually. The number fell to six in 1958. The disease became extinct the following year.

Six other officially listed contagious diseases in Taiwan are shigellosis, typhoid, typhus, diphtheria, scarlet fever, and Japanese encephalitis.

## BULGARIA

### Warning of Impending National Water Shortage

AU3103153991 Sofia OTECHESTVEN VESTNIK  
in Bulgarian 23 Mar 91 p 1

[Text] The water in the Iskur Reservoir outside Sofia has reached the lowest level in the reservoir's 25-year-long history. In spite of the copious rainfall at the end of the winter, if further rains fail to come in the spring, the population of Sofia will be very thirsty this summer. Similar major problems exist in a number of other populated areas, according to a statement issued by the

Federal Consumers Council, prepared after a detailed investigation of the water supplies to 3,159 towns and villages with a total population of 6.2 million. Half of the places investigated suffer from irregular water supplies, while 175 of them receive no water at all, and 547 have water only for two or three hours a day. In addition to the shortages, the drinking water is frequently of poor quality, and this is already posing serious health problems. In many localities the water is contaminated with nitrates, ammonia, manganese, and other compounds. According to the information of the Ministry of Public Health, in 296 centers of population the drinking water does not meet the Bulgarian State Standard because the treatment facilities are inefficient.

**BOLIVIA****Yellow Fever Reported in Santa Cruz Jungle**

PY0604012091 *La Paz Radio Fides in Spanish*  
1100 GMT 5 Apr 91

[Summary] The Santa Cruz sanitation unit is interested in enhancing the yellow fever control program in the jungle. This disease has already claimed about 20 victims and could reach the urban centers.

**CHILE****First Cholera Case Reported in Antofagasta**

PY2003145091 *Santiago Radio Nacional de Chile Network in Spanish* 1100 GMT 20 Mar 91

[Text] The first case of cholera has been reported by the regional hospital in Antofagasta. The illness was detected in a man who came from Tacna, Peru, on an interprovincial bus which covers the Arica-Santiago route.

According to first reports the man was identified as Brazilian soccer player, Natalicio Reginaldo Aitor, 24, who boarded the bus in Arica to start a vacation in southern Chile. The man suffered intestinal pain in Antofagasta, and the bus driver suggested that he buy some medicine so he could continue the trip. But after more pain, vomiting, and diarrhea he was taken to a clinic and then transferred to the regional hospital. After a lab test and a meeting of doctors headed by Dr. Mario Goycone, an epidemiologist, the illness was diagnosed as cholera. The man is isolated in the hospital's bronchopneumonia wing under strict medical care.

New information and an official report on this case are expected from Dr. Mario Bernie Hernandez, the health director of the Second Region. The southbound bus was stopped in Copiapo for a complete medical check of the passengers who will be held in quarantine or isolation if Atacama health officials deem necessary.

**Health Under Secretary Asserts 'No Cholera Cases'**

PY2203144891 *Santiago Radio Nacional de Chile Network in Spanish* 1100 GMT 22 Mar 91

[Summary] Health Under Secretary Patricio Silva has asserted that so far, no cholera cases have been registered in Chile. He reported that tests on an alleged cholera patient in Antofagasta have proven negative. He added that sanitary measures to prevent the epidemic are still in force.

**COLOMBIA****Six Cholera Cases in Pacific Coast**

PA2703032091 *Bogota Inravisión Television Cadena 1 in Spanish* 0014 GMT 27 Mar 91

[Text] The health minister placed the Pacific coastal regions of Narino, Cauca, and Choco Departments on a state of alert today because six cases of cholera have been confirmed up to now. Seventy-five samples were sent to the National Health Institute in Bogota to be analyzed, however the authorities say we cannot talk about a cholera epidemic in the country.

**Authorities Report Six Cholera Cases; Total Reaches 19**

PA0104032791 *Bogota Inravisión Television Cadena 1 in Spanish* 0100 GMT 1 Apr 91

[Text] The National Health Institute today confirmed that six more persons are sick with cholera. Five of them live in Tumaco and one of them in Salahonda. This brings up to nineteen the number of cholera sufferers in the country.

**COSTA RICA****Rise in Cases of Measles Spur Vaccination Campaign**

91WE0240A *San Jose LA NACION in Spanish*  
19 Feb 91 p 12

[Article by Maria Isabel Solis]

[Text] According to information from the Ministry of Health Department of Epidemiological Surveillance, the number of cases of measles rose to 92 yesterday, 10 more than Friday's total.

Dr. Leonardo Maranghello, director of the department, said the victims are mainly found in Limon and San Jose Provinces and that the canton with the highest incidence so far is Pococi, with 27.

It is precisely in these areas that the vaccination campaign has been intensified. According to telephone surveys of health centers conducted by LA NACION, vaccinations are offered continually from 0700 to 1500 hours.

To date, the people most affected are those over 15. It should be emphasized that vaccination programs now in effect throughout the national territory provide no protection for persons in that age group.

Nor does the World Health Organization (WHO) recommend boosters for those over the age of 15. Rather, it gives priority to vaccinating children under the age of 15 months inasmuch as they are the most vulnerable to measles and have the highest mortality rates due to the disease.

According to Dr. Elieth Montecinos, Pan American Health Organization (PAHO) adviser on maternal and infant health in Costa Rica, one could vaccinate only those adults who have been exposed to measles.

Montecinos said it is too early to evaluate how far the epidemic has spread in Costa Rica because it has just begun. In the meantime, Dr. Maranghello says this is the epidemic we have done the best job fighting because the number of cases may be lower than in previous years.

## PARAGUAY

### Health Center Director Reports Two Cholera Cases

PY0804024291 Asuncion NOTICIAS in Spanish  
7 Apr 91 p 8

[Text] Carapegua—Two cases that are believed to be cholera have been detected in this city. The two patients died; one of them in less than 12 hours. The director of the local health center revealed the information, saying it is cholera. Medical specialists said, however, that only a lab test can confirm the presence of cholera in our country.

### Health Ministry Official Denies Cholera Cases

PY0804221691 Asuncion ULTIMA HORA in Spanish  
8 Apr 91 p 1

[Text] Dr. Humberto Recalde, head of the Communicable Diseases Department of the Public Health Ministry, reported this morning that the deaths that occurred in Carapegua were probably not caused by cholera.

## PERU

### Health Ministry Reports 88,748 Cholera Cases To Date

PY2203140291 Madrid EFE in English 0827 GMT  
22 Mar 91

[Text] Lima, March 22 (EFE)—Nearly 89,000 Peruvians have been stricken by cholera since the epidemic broke out earlier this year and 535 of them have died from the disease, according to the latest Health Ministry figures. Of the total 88,748 cases reported to date, 25,804 people have been hospitalized, but a state hospital workers strike this month has severely curtailed efforts to ensure that the victims receive treatment, a Health Ministry spokesman said Thursday [21 March].

In addition to the public health threat, bans on imports of Peruvian food have so far cost the economy around \$300 million, according to President Alberto Fujimori, who said that the disease was under control.

The official news agency ANDINA Thursday quoted a Customs official as saying that the Health Ministry was

ignoring his pleas to pick up a shipment of medicine and serum donated by Mexico to help counter the epidemic. "The crates are left out in the open exposed to the bad weather, while hospitals and health care centers are clamoring to receive the medicine," the official said.

### EC Lifts Some Restrictions on Food Imports

PY2203171391 Madrid EFE in Spanish 2242 GMT  
20 Mar 91

[Quotation marks as received]

[Text] Lima, 20 Mar (EFE)—The Peruvian Government indicated today that the EC "will shortly lift some trade restrictions" that are currently applied to imports of Peruvian fish. The restrictions are being applied because of the cholera epidemic that is affecting this country.

The Foreign Ministry communique states that the EC has authorized the free import of Peruvian fish meal. The only requirement for other fish products is a hygienic control certificate that is issued by the Public Enterprise for Fishing Certificates (Cerper).

The communique adds that the EC is maintaining its ban on the import of seafood and products derived from the informal fishing sector, which are considered to be the cause of the epidemic according to a mission that visited Peru at the beginning of the month.

Moreover, it has been learned in Brussels that the EC has imposed a waiting period until its Veterinary, Fruit, and Vegetables Committees make their decision. Until then, EC member countries can unilaterally apply the restrictions on Peruvian imports as they deem appropriate.

The official communique does not refer to the restrictions on the import of agricultural products, but it is hoped that the EC will make a decision on this next week.

The Peruvian Foreign Ministry also expresses its "satisfaction with the decision by the EC, which confirms "the optimum quality and adequate hygienic conditions of fish products, and the capability and scientific thoroughness with which the state implements its quality control function to the products that Peru exports."

It adds that the EC's decision must "be thoroughly deliberated" by the countries that maintain restrictions on the import of Peruvian foodstuffs.

The restrictions on Peruvian products were adopted by the majority of its international clients following the outbreak of a cholera epidemic some seven weeks ago. Some 80,000 people have caught cholera so far, of which 382 have died, according to official figures.

The EC and the United States, which also adopted severe restrictions, buy approximately 90 percent of Peruvian food exports, which amounted to \$400 million in 1990.

Official sources have estimated that this year Peru may lose between \$100 and \$230 million due to a drop in its exports and to a recession in the tourist industry because of the cholera epidemic.

### WHO To Ask Japan To Help Fight Cholera Outbreak

OW2703110791 Tokyo KYODO in English 0847 GMT 27 Mar 91

[Text] Lima, March 26 KYODO—The World Health Organization (WHO) will approach the International Monetary Fund (IMF) and the Japanese government for help in combating a cholera outbreak in Peru, the organization's Director General Hiroshi Nakajima said Tuesday.

Nakajima told a press conference in Lima that the help would be in the form of repairs to Peru's drainage system in accordance with a plan submitted by the Peruvian Government.

Nakajima stressed the effectiveness of introducing a Japanese system for detecting the cholera bacteria in order to quickly isolate carriers of the disease.

He said existing vaccines have proved ineffective and WHO is considering sending several other types of vaccines to Peru.

### Officials Comment on Health Workers Strike

PY2403212091 Madrid EFE in English 0445 GMT 24 Mar 91

[Text] Lima, March 23 (EFE)—A week-long strike by 85,000 Peruvian health workers could endanger government efforts to stem the country's cholera epidemic that has already claimed more than 500 lives, Health Ministry officials said Saturday [23 March].

The stoppage by 80,000 public health employees and 5,000 state nurses could have "serious consequences" for the treatment of some 25,000 people who have been hospitalized with the disease, the officials said.

Because of the walkout by health workers, relatives of cholera patients have had to clean hospital wards in order to maintain standards of hygiene, officials said.

Nurses rejected a 95 percent pay offer last month, and union leaders said they would resist government attempts to cut jobs in health care as part of a policy to reduce the state sector's one-million-strong workforce.

A three-month strike by health workers last year led to mass closures of hospitals, with patients forced home or transferred for treatment at military or police hospitals.

Almost 89,000 people have contracted cholera since the first outbreak was reported on January 23. The disease is believed to have originated in contaminated shellfish.

### Cholera Cases Increase Following Easter Holidays

PY0204002091 Madrid EFE in English 0000 GMT 2 Apr 91

[Text] Lima, April 1 (EFE)—Doctors at hospitals in several poor regions of Peru were on Monday [1 April] treating cholera patients on benches and hallway floors following the Easter holidays during which many Peruvians ignored health officials' warning not to eat seafood.

On Sunday, some 250 people were taken to the Lima hospital Dos de Mayo for treatment of the disease, which has infected some 100,000 people and killed 609 since the epidemic erupted late January. At Dos de Mayo only one doctor and a nurse were available to attend the patients, as some 85,000 state health workers entered the 13th day of a strike for higher wages.

Most of the sick come from poverty-stricken areas with poor sewage systems and are unable to pay for treatment.

Doctors said many Peruvians ignored warnings not to eat seafood during the Easter holidays. Some hospitals reported a 40 percent increase in cholera cases since the holidays. The Health Ministry has told the public not to eat fish netted off the Pacific coast, where Peru dumps most of its raw sewage, as it could be contaminated with the cholera virus.

Since February, the disease has spread to neighboring Ecuador and Colombia.

### Further on Cholera Epidemic

PY0304203891 Lima RTP Television Network in Spanish 0100 GMT 3 Apr 91

[Excerpt] Cholera cases at the hospitals and the mortality rate continue to increase in an alarming way. The situation is increasingly worrisome for the patients because of a strike affecting the health sector.

Cholera cases continue to increase at the various hospitals in our capital. At the 2 de Mayo hospital, for example, there are now 147 patients.

Dr. Jose Gonzalez, the deputy director of the 2 de Mayo hospital, has said that a daily average of 70 patients with cholera are admitted to the hospital. More pavilions have been set up to admit patients, he said. [passage omitted]

### Cholera Cases Increase After Holy Week

P10404050091 Lima RTP Television Network in Spanish 0130 GMT 4 Apr 91

[Text] The situation at the Arzobispo Loayza Hospital is dramatic in view of the increase in the number of cholera cases that are being treated at this health center. In addition, the medicine stock could be depleted at any time.

The cholera epidemic has turned into an earthquake that is devastating our country because of carelessness and



lack of interest. A daily average of 100 cholera-infected patients came to the Loayza Hospital before Holy Week. More than 200 patients are now coming to the hospital for treatment, of which 40 are hospitalized in serious condition. [Begin recording]

**Unidentified reporter:** Are the people no longer afraid of the disease?

**Dr. Carlos Moreno from Loayza Hospital:** I believe the people are basically irresponsible. Since they know they will get free treatment and since they know the disease is being put under control thanks to Health Ministry personnel, they are returning to the sources of infection. Ninety percent of the patients who come to this hospital say they had eaten on the streets. If the people do not heed the health measures dictated by the Health Ministry, we will definitely not be able to put the epidemic under control. Up until now, we are giving patients free medicine at the hospital. Other hospitals are charging for the medicines, and I cannot tell you how much longer the Loayza Hospital will have the economic capacity to provide free treatment to patients. The people should learn that sooner or later they will have to pay the costs of this epidemic because I believe the government will not be able to do it.

**Reporter:** What is the cost a patient must pay for a 24-hour treatment?

**Moreno:** The average cost per patient is about \$100 per day. [end recording]

#### **Health Minister Announces Campaign Against Cholera**

PY0804024891 Madrid EFE in English 0052 GMT 8 Apr 91

[Excerpts] Lima, April 7 (EFE)—Peruvian Health Minister Victor Yamamoto said Sunday [7 April] he is planning to redouble preventive and curative efforts to fight the spread of a cholera epidemic which has claimed nearly 1,000 lives in two months. He said the campaign would be "intense and specific" and include greater public education, vaccination programs, measures to ban street food vendors and the construction of more wells for drinking water.

The first cholera epidemic in Latin America in more than a century has killed around 1,000 Peruvians and infected at least 130,000 more since February, the Health Ministry said Saturday.

Yamamoto's announcement came amid dire news from medical experts. A spokesman for the Epidemiology Department said mortality levels had jumped and the number of infected increased 87 percent since the disease surfaced in February because of insufficient preventive and sanitary measures and public awareness campaigns. [passage omitted]

The Paraguayan daily NOTICIAS reported Sunday, meanwhile, that cholera has claimed its first two victims

in Paraguay in the town of Carapegua, 85 km southeast of Asuncion. Two women, aged 33 and 40, checked in to clinics complaining of the severe diarrhea and vomiting characteristics of cholera, but died last week within hours of dehydration.

Carapegua health clinic director Amancio Medina said neither of the two had been tested for disease, but added, "The symptoms clearly correspond to cholera, and one can affirm that they died of the disease. The women were the first reported victims of the disease in Paraguay, where officials have begun exhaustive public education campaigns and set up special centers to deal with possible cases.

In Uruguay, health authorities on Sunday declared a state of alert, and Health Minister Aldo Solari said he believed his country would see its first cases by the end of April.

"Unfortunately, the epidemic in Peru has not been controlled and limited to that country," Solari told reporters. "When an epidemic like this one continues during a given period of time and extends to such a large percentage of the population, it enters in a different phase, an endemic situation," he added.

Several people have died in Ecuador and Colombia of cholera and the disease is suspected to have spread to western parts of Brazil.

#### **Cholera Cases in Lima Hospital Decreasing**

PY0804233091 Lima RTP Television Network in Spanish 1800 GMT 8 Apr 91

[Excerpt] The number of cholera cases is decreasing at the Santa Rosa Hospital. Fewer cases were reported this weekend as compared to other weekends.

The number of cholera cases has decreased considerably this weekend after the new outbreak early this month. For example, the number of cholera cases in Santa Rosa Hospital has decreased considerably. From 17 cases daily during the outbreak, there are now only six or seven cases daily, according to an information provided by Dr. Guillermo Tagliabu, director of the of Santa Rosa Hospital. He also said that the health workers' strike is not affecting the medical attention in the hospital because there is sufficient staff to take care of emergencies. The hospital wards are clean despite the strike but the other hospital facilities are dirty. [passage omitted]

#### **Cholera Bacteria Detected in Coastal Fish, Water**

PY0604020691 Lima RTP Television Network in Spanish 1100 GMT 5 Apr 91

[Text] The National Health Institute has confirmed that it has detected cholera bacteria in the skin and intestines of atherine, mackerel, and mussels, and in water samples taken from some places along the coast.



## BANGLADESH

### Unknown Disease Claims 39 Lives in Hill Tracts

BK2603085991 Hong Kong AFP in English 0344 GMT  
26 Mar 91

[Text] Dhaka, March 26 (AFP)—At least 39 people have died during the last two weeks of an unknown disease in Bangladesh's southeastern Chittagong hill tracts, the mass-circulation daily ITTEFAQ reported Tuesday.

It said the disease was rampant in Bandarban district where the victims first developed a high fever and then vomited blood before dying.

A medical team was working in the area, it said.

Local officials could not immediately be reached for details.

## IRAQ

### IRNA Cites Red Cross, UK Press on Iraqi Arabs' Plight

LD0604162191 Tehran IRNA in English 1512 GMT  
6 Apr 91

[Text] London, April 6, IRNA—People in southern Iraq face a "health catastrophe of immense proportions", as a drastic shortage of safe drinking water has led to serious health problems, including a dramatic increase in diarrhoea among children, often resulting in death within a few hours, the International Committee of the Red Cross (ICRC) has warned. The ICRC said the risk of epidemics was increasing daily in southern Iraq as temperatures rose, and it has appealed to the international community to mobilise urgently, "far greater means" to prevent the situation developing into a long-term disaster.

The British media has given only minimal coverage to the plight of the Arabs of Iraq who are predominantly Shi'ite, compared with the extensive coverage given to the Kurdish situation in the north. Although this could partly be explained away by the claim that journalists have greater access to northern Iraq, which was for some weeks, totally under the control of the Kurds, this by no means serves as a complete excuse. It must be accepted that to a certain extent, in many British papers, the plight of the Iraqi Arabs is being virtually ignored. If this were not the case, the story of Red Cross appeals for refugees in southern Iraq, would have been carried by more British papers on Saturday. According to the UK daily, the FINANCIAL TIMES (FT), that did run the story, the whole of the area of southern Iraq not under U.S. occupation, including the holy cities of Karbala' and al-Najaf, is affected by the shortage of clean drinking water. The electricity network was destroyed during the coalition bombardment of the area. In addition, sewage stations no longer function and the remaining water system needed to be chemically cleaned.

A film, smuggled out of Iraq was shown Friday at a Muslim gathering in London, and shows the destruction of the holy cities of Karbala' and al-Najaf. It reveals that the destruction of the shrines by Iraqi troops still loyal to Saddam Husayn, was on the whole deliberate. It also reveals that torture has taken place within the confines of the shrines themselves. The desecration of the holy shrines and the imprisonment of ulema has unmasked Saddam Husayn's Islamic pretensions, which he so loudly bragged about during his war with the Americans. Even the non-Muslim Mongols during their sack of Baghdad in 1258 stayed clear of Karbala', al-Najaf and the holy shrines, as history records.

Up to 2,000 Iraqi refugees are pouring daily into makeshift camps in U.S.-occupied southern Iraq, to seek sanctuary from Saddam's forces, but observers have said they are likely to find themselves stranded in Iraq after the U.S. withdraws. Most of the Iraqi Arabs southern Iraq are received in a U.S. Army-run camp which was set up last week. According to reports in the British press, American troops said on Friday that the number of refugees under their control is already in excess of 10,000. The FT and THE GUARDIAN newspaper both mentioned that the refugees are "desperate to avoid a return to Iraq", which would "entail likely death or torture". THE GUARDIAN pointed out that while Friday's UN resolution on the Kurds in northern Iraq called on the Baghdad regime to allow the Red Cross into Kurdish areas, it "made no mention of similar help going to the Iraqi Arabs, whose uprising continues in southern Iraq despite the weapons of mass destruction deployed against them by the republican guard".

Tens of thousands of Iraqi arabs have also sought refuge in Iran since the start of the popular rising in Iraq following the routing of the Ba'athist war machine at the hands of the American led forces.

### UN Official Warns of Epidemics, Hunger, Inflation

AU2003134791 Paris AFP in English 1323 GMT  
20 Mar 91

[Text] Geneva, March 20 (AFP) — Epidemics, shortages of food and fuel, and raging inflation are stalking Iraq where the structure of daily life has been ravaged by warfare, United Nations special envoy Martti Ahtisaari said here on Wednesday [20 March].

Mr. Ahtisaari, who has spent a week in Iraq to assess the need for emergency help, was speaking during a halt on his way to New York to report to U.S. Secretary General Javier Perez de Cuellar and to the Security Council.

Reporting that owing to war damage the "situation is extremely difficult", he said that he had been unable to make a planned visit to Kuwait because of the disorganisation confronting authorities.

He said: "Iraq is a fairly developed society, highly urbanised and very mechanised, so people are used to clean water, proper sanitation, and none of this is available."

The destruction of sewerage systems, of water purification plants, and the lack of appropriate treatment products resulted in a threat of epidemics.

The danger was growing as summer approached in the absence of supplies of electricity to power refrigeration units.

Hunger was not evident. "This is not Ethiopia...But inflation is horrendous. Even if there is a little bit (of food) available on the markets, as prices have gone up tremendously it makes it impossible for people to buy anything," he said.

Mr. Ahtisaari, who met Iraqi Foreign Minister Tariq 'Aziz, said that he had not seen any signs of civil war with Kurdish forces at Al-Mawsil in the north of the country, but reported that many troops could be seen in towns.

Mr. Ahtisaari, who is U.N. Deputy Secretary General, paid tribute to the work of the International Committee of the Red Cross (ICRC) which had warned late Tuesday that Iraq was suffering from a severe shortage of food.

"We're trying to alert people to act fast...and make everybody aware of the necessary remedies," he said.

Aid would be provided by non-governmental organisations said as the ICRC and by the United Nations depending on the amount of finance from member states, he said.

His conclusions were in line with those of the World Health Organisation and the UNICEF United Nations children's fund in February.

The United Nations High Commissioner for Refugees (UNHCR) said here on Wednesday that since January 15 about 65,000 people had fled from Iraq and Kuwait to Iran, Jordan, Syria and Turkey.

When fighting began, most of the displaced persons arrived from third countries via Jordan, but later most of them were Iraqi nationals fleeing the war zone or civil unrest. Most of them headed for Iran where 30,000 people were assembled in camps, and for Turkey.

## ISRAEL

### Hoof and Mouth Disease Discovered; Quarantine Imposed

*TA2403114191 Tel Aviv IDF Radio in Hebrew  
0930 GMT 24 Mar 91*

[Text] A strict quarantine has been imposed on all the Jordan Rift Valley and Lower Galilee cattle and sheep ranches after the discovery of hoof and mouth disease among the sheep and cattle of Moshav Kefar Zetim.

### Serodiagnostics of Q Fever in the Moldovan SSR

91WE0267 Kishinev ZDRAVOOKHRANENIYE  
in Russian Vol 6, Nov-Dec 90 [manuscript received  
20 Apr 90] pp 41-42

[Article by M. V. Magdey, G. N. Sandu, L. A. Dutka, and  
D. S. Morar, Department of Extremely Dangerous Infections,  
Moldovan Health-Epidemiology Station, Moldovan SSR Ministry of Health]

UDC 616.981.718-078

[Text] The considerable polymorphism of the clinical manifestations of Q rickettsiosis, the absence of distinct pathognomonic symptoms, the wide range of severity and duration of the illness, and the similarity of the illness with many other infectious diseases makes clinical diagnosis difficult and, in a number of cases, impossible without serological tests.

The first reports of Q fever in Moldova appeared in 1956, when I. R. Drobinskiy diagnosed it in three individuals who had been working at a meat plant and had been sent to the hospital with a diagnosis of typhus-paratyphus fever.

Meanwhile, it was not until recently that serological diagnosis of the infection was performed on a regular basis and systematically in the republic.

A more direct identification of Q fever became possible in 1985, when the complementation fixation (CF) test with the *Coxiella burnetii* antigen began to be widely used in the day-to-day work of the laboratory of extremely dangerous infections of the republic's health-epidemiology station.

With an eye to studying and identifying the diagnostic possibilities of the CF test in the diagnosis of Q fever and the epidemiological features of identified cases of the illness, we conducted serological tests for Q fever in 1987-1989 in patients and individuals who had occupational ties with animal husbandry and the products of animal husbandry. We also studied the extent of *C. burnetii* infestation among farm animals that are the primary sources of the pathogen.

Our initial investigations were aimed at identifying Q fever in patients hospitalized in treatment facilities of the republic with diagnoses of influenza, acute respiratory infection, pneumonia, bronchitis, leptospirosis, brucellosis, or typhus-paratyphus fever in which pathology due to *C. burnetii* had not been ruled out, because the initial diagnoses, in most cases, had not been confirmed by appropriate laboratory tests. A total of 473 such individuals were examined, and in 44 of them (9.3%), the CF test was positive in titers of 1:10 to 1:1280 (see table).

Serological Diagnosis of Q Fever in 1987-1989

Serological Diagnosis of Q fever in 1987-1989																						
Individuals whose diagnoses had not ruled out Q fever												Stock breeders and equivalents										
Year	Total	CF test positives	Per-cent-age	in titers of								Total	CF test positives	Per-cent-age	in titers of							
				1:10	1:20	1:40	1:80	1:160	1:320	1:640	1:1280				1:10	1:20	1:40	1:80	1:160	1:320		
1987	49	6	12.2	4	1	1	-	-	-	-	-	632	53	9.3	44	9						
1988	296	21	7.0	9	4	4	3	1	-	-	-	916	55	6.0	33	18	4					
1989	128	17	13.2	2	2	4	1	2	2	3	1	1319	105	7.2	59	33	8	3	1	1		
Totals	473	44	9.3	15	7	9	4	3	2	3	1	2867	213	7.4	136	60	12	3	1	1		

Blood sera were studied in the CF test in the usual technic employing *C. burnetii* antigen, over the course of the illness, one to three times. In repeat tests, a two- to fourfold increase in antibody titers was noted in eight patients, but based on clinical and diagnostic data and the results of the serological tests, Q fever was also diagnosed in four other patients. In all, Q fever was diagnosed in 12 patients, but Q rickettsiosis had been suspected in only three when they were admitted to the hospital; the other patients had been hospitalized with erroneous diagnoses: leptospirosis (3), bronchial pneumonia or bronchitis (2), adenoviral infection [AVI] and acute respiratory viral infection (2), typhus-paratyphus fever (2), and fever of unknown origin (1).

The appearance of complement-fixing antibodies was noted in most of the patient (8 of 12) later than 10-14 days after the onset of the illness. Among those with Q fever, only five had occupational contact with animals

and animal products. The others kept sheep, goats, or, more rarely, cattle on their personal farm plots; those animals were the primary sources of the Q rickettsiosis. There was a spring-summer seasonality to the illness, with 92.9% of the cases recorded between March and July. In light of the high CF antibody titers, we also studied the possible sources of the infection with tests of the sera of 49 sheep in the patients' personal environs. Five seropositive animals (10.2%) were identified in titration of 1/10-1/20.

Among those who had had contact with animals in their environs, antibodies to *C. burnetii* were identified in titers of 1:10-1:160 in 25% of cases.

Among 2,867 individuals under study with elevated risk (workers from sheep and pig farms, milkers, veterinary workers, and meat plant workers), some 7.4% had positive serological tests, with two individuals showing titers

of 1:160 and 1:320. The No. 1 category in terms of degree of risk of infection with *C. burnetti* belonged to workers from stock breeding farms; the No. 2 category belonged to meat plant workers.

The results of our study provide the basis to corroborate the presence of Q rickettsiosis in the republic. That dictates the need for improved clinical and laboratory diagnostics of Q fever and the wide use of the CF serological test with *C. burnetti*, which helps to decipher "undetermined" pathological states, choose the correct treatment tactic, and organize the proper preventive work in Q rickettsiosis.

#### **Ukrainian Minister Asks Aid in Diphtheria Fight**

91WE02464 Stockholm DAGENS NYHETER  
in Swedish 7 Mar 91 p 9

[Report from TT [Wire Service, Inc.]: "The Ukraine Appeals for Help Against Diphtheria"]

[Text] The Soviet Republic of the Ukraine has been struck by a diphtheria epidemic. Half a million children require immediate vaccination. The republic's minister of health, Volodymyr Ushakov, is now appealing to the charitable organization Hoppets Stjarna for help.

The diphtheria epidemic broke out in the fall of 1990. Children in the area who have not been vaccinated against the disease comprise a major at-risk group.

"These children are unvaccinated because of major fallout from the Chernobyl catastrophe which struck the Chornovtsy area. The parents of small children were afraid, and did not know whether it could be harmful to vaccinate children. It has subsequently been found that children aged three to six years are suffering from incurable liver and hemopoietic conditions, as well as hairloss. The area has been struck by an ecological catastrophe," Erik Gunnar Eriksson of Hoppets Stjarna told TT [Wire Service, Inc.].

The Ukrainian minister of health is now appealing for assistance, principally in the form of needles and syringes. Vaccine against diphtheria is available to some extent, but it can not be injected because the health authorities lack this equipment.

Personnel from Hoppets Stjarna in Karlsjo in Angermanland are now busy trying to obtain the desired needles.

"We have been in contact with medical companies, and I have also sent a telex to a factory in Taiwan to determine how quickly they can make delivery," says Eriksson.

#### **Flu Epidemic Reported in Soviet Union**

LD2203163291 Moscow TASS in English 1558 GMT  
22 Mar 91

[Article by TASS correspondents Eleonora Sutotskaya and Sergey Trofimov]

[Text] Moscow March 22 TASS—Flu hit many Soviet cities at this time of the year—from Vitebsk in Belorussia where its epidemic started in February to Khabarovsk where flu is rampant now. This week the incidence of flu was particularly high in Moscow (more than 40,000 cases) and in Ulan-Ude in Burvatia where school vacations began earlier than usual to decrease the epidemic. Flu is raging in Siberian cities, particularly in Novosibirsk and in Sverdlovsk in the Urals. TASS learned this from Mikhail Markevich, chief of the epidemiological agency of the USSR Health Ministry.

"Flu of B group usually causes epidemics that last long. We expect to get this epidemic under control by April," Markevich said.

#### **Kiev Birthrate Down, Death Rate, Radiation Up**

PM2803165391 Moscow KOMSOMOLSKAYA  
PRAVDA in Russian 26 Mar 91 p 4

[From feature comprising INTERFAX, POSTFACTUM reports: "The Birthrate Falls..."]

[Text] There has been a fourfold decrease in the natural increase in Kiev's population over the past two years. Per 1,000 head of population this indicator has now reached its record low for all the years of observations.

In the opinion of demographers, this is a result of the critical socioeconomic and ecological situation in the city. It has made for the drop in the birthrate and the increase in the death rate among Kiev residents. INTERFAX's correspondent was told at the city statistical administration that the birthrate in Kiev has fallen 12 percent over the past two years alone, while the death rate has increased 5 percent.

#### **And Radiation Rises**

Vladimir Boreyko, director of an independent ecological-cultural center created in August 1989, reported in an interview with the POSTFACTUM agency that, according to his data, the background radiation in one apartment in every 10 in the city is 50-100 percent above the norm. Boreyko emphasized that the increased background may have been caused by things that have been brought out of Chernobyl and have, maybe, ended up in Kiev homes by way of the black market.

## DENMARK

**MMR Vaccination Campaign in Arhus County***91WE0232A Copenhagen BERLINGSKE TIDENDE in Danish 12 Feb 91 p 6*

[Article by Peter Hvidtfeldt: "Danger of Epidemic Among Twelve-Year-Olds"]

[Text] Far too few children are given MMR [Measles-Mumps-Rubella] vaccinations, according to authorities in Arhus County, where a massive campaign has recently been launched aiming at the twelve-year-olds in the county. MMR stands for measles, mumps, and rubella; a single injection vaccinates against these three childhood diseases. "In 1989, 49 percent of the twelve-year-olds in Arhus County had been vaccinated, while the figure on the national level was 46 percent," said county hygiene worker Gerda Haahr, who cautioned that this low percentage could lead to an epidemic among young people in the near future. "We have not yet seen any signs of an epidemic here in Denmark, but they do occur when the group involved has not had the disease or has not been vaccinated," Haahr said, adding that the county has set a vaccination goal of 90 percent. "Our purpose is quite simply to eradicate these diseases. They can have serious consequences—especially if a person gets them after puberty. Measles can cause inflammation in the brain; mumps, in boys, can lead to painful inflammation of the testicles, possibly followed by sterility; while rubella in a pregnant woman can cause serious damage to the fetus," Gerda Haahr said.

**Rabies Epidemic Concern in Greenland***91WE0232C Nuuk GRONLANDSPOSTEN in Danish 4 Jan 91 p 11*

[Article: "Rabies-Infected Reindeer"]

[Text] The reindeer that at the end of last November got into a brawl with a Norwegian who was out skiing in the Buksefjord area, where he works, had rabies. State Veterinarian Soren Holck says that the reindeer had probably been bitten by a rabies-infected fox. Consequently, people in Buksefjord and in the Nuuk area are cautioned to watch out for reindeer or other animals that behave in an unusual manner; they might have rabies. In Ikamiut, in the municipality of Kangaatsiaq, sled dogs have been put into isolation until further notice, since it was determined that one of them had rabies. The state veterinarian believes that this dog also had been bitten by a fox. "It must be emphasized that dogs must always be vaccinated at least every three years, and that the fox population in the district must be kept down, since foxes provide a constant reservoir for rabies," Soren Holck said.

## FRANCE

**First Case of 'Mad Cow' Disease Reported***91WE0255B Paris LE MONDE in French 2 Mar 91 p 12*

[Article by M.L.]

[Text] A case of bovine spongiform encephalitis (BSE), the so-called "mad cow" disease, was reported for the first time in France in a milk cow in Plouha, Cotes d'Armor, the Ministry of Agriculture announced on Thursday, 28 February. "A thorough investigation is now under way to determine the causes of the outbreak of the disease on that farm," the ministry said. In particular, officials want to know the animal's genealogy and what it was fed.

For the time being, measures have been taken such as quarantining and identifying the herd. Animals on the farm in Brittany (about 60) have been bought for research by the National Center of Veterinary and Feed Studies in Lyon.

Discovered in Great Britain in 1986, "mad cow" disease was the cause of a veritable epidemic across the Channel. Spongiform encephalitis is the bovine equivalent of "trembles" in sheep. The vector of contagion in sheep was allegedly transmitted to cattle in animal meal. Contamination of the meal is thought to have resulted in 1981 from a modification in the processing of slaughterhouse by-products in England. Banned since 1989, such British-made feed had previously been distributed throughout France, however.

Since BSE first appeared in the United Kingdom and Ireland, French veterinary services have implemented a number of preventive measures, such as the establishment of a network of epidemiological surveillance in all departments. In November, a case of bovine spongiform encephalitis was discovered in Switzerland, apparently the first case recognized in continental Europe. In December, the French Ministry of Agriculture set forth sanitary and financial provisions concerning the outbreak of the disease in the national territory.

"One can reasonably anticipate the outbreak of more cases in France," the Ministry of Agriculture veterinary departments warn, "but we shall not find ourselves in the same situation as the British, because our cows have not been fed the same large proportions of animal meal imported from England and we have practically no cases of trembles in sheep."

## SWEDEN

**Salmonella Epidemic, Severe Complication, in Lulea***91WE0245B Stockholm DAGENS NYHETER in Swedish 5 Mar 91 p 6*

[Unattributed article: "Salmonella Victim Suffers Complications"]

[Text] One of the 36 people infected in the salmonella epidemic at the SAS Hotel in Lulea has come down with



a severe complication. The patient was admitted to the infectious diseases clinic in Boden with an abscess in the spleen. Twenty-nine of the 36 people infected were employees of the SAS Hotel. The other seven victims were from Lulea and Pitea.

As yet, no one knows how the salmonella virus entered the hotel.

### **Over 1,000 Horses Quarantined for Equine Herpes**

91WE0245A Stockholm DAGENS NYHETER  
in Swedish 3 Mar 91 p 5

[Article by Anita Sjoblom: "Virus-Infected Horses Destroyed"—first paragraph is DAGENS NYHETER introduction]

[Text] Two horses were destroyed after being stricken by paralysis from a viral infection. More than 1,000 horses have been quarantined in Ostergotland in order to prevent the virus from causing an epidemic.

A week ago, the Swedish Veterinary Medicine Institute ascertained that a stable at Norrkoping's riding club was infected by the equine herpes virus type 1. Two horses suffered paralysis and were put down, while other horses diagnosed with the virus had mild cold symptoms.

#### **Hides Itself**

"It is a frequently occurring virus which can cause an upper respiratory tract infection, miscarriage in a pregnant mare, or paralysis after a blood clot," said Berndt Klingeborn, laboratory director at the Veterinary Medicine Institute's virus laboratory. Which symptoms manifest themselves depends upon which variant of the virus is present.

There is no cure for the virus and only short-term protection from vaccine. Pregnant mares can be vaccinated and protected for three to six months. Being a herpes virus, it hides when it reaches the bloodstream.

"The severe form, with neurological damage, usually appears each year in isolated cases," said Berndt Klingeborn. An epidemic broke out in 1983, when a number of horses were transported from Jagersro to various places in Sweden before the virus had been detected.

He said that severely afflicted horses who recover again may have damage in the spinal cord or the brain. "It is important that horses and stables with the infection are quarantined at least three weeks."

#### **Guest Stable**

The affected stable in Norrkoping is used as a guest stable and by the club's members during the winter.

"As soon as we diagnosed the infection, we charted all of the contacts between the horses in this stable and other horses," said Johan Spetz, director at Norrkoping's

riding school, where no cases have as yet been diagnosed. It was during training and competitions that the horses have had contact.

Veterinarians have taken blood samples from all the horses to ascertain whether others are infected. The riding association in Ostergotland has recommended to all who keep horses in Norrkoping, Finspang, Vikboland, and Soderkoping that they place the horses in quarantine.

## **UNITED KINGDOM**

### **Concern Over Doubling of Childhood Diabetes**

91WE0280 London THE DAILY TELEGRAPH  
in English 22 Feb 91 p 6

[Article by Peter Pallot, Health Services Staff]

[Text] The number of children with diabetes has almost doubled over the past two decades, researchers say today.

In 1988, doctors throughout the British Isles were asked to log cases of diabetes in children under 15 to allow the total to be checked against an earlier study.

They found there were 13.5 cases a year per 100,000 children, compared with 7.7 cases a year per 100,000 in 1973.

Prof. David Baum, of the Institute of Child Health in Bristol, said in the British Medical Journal that there had been a particularly sharp rise in those under four. About 25 percent of new cases were in those under four, compared to 19 percent in the 1973 study.

"If diabetes is becoming more common in this age group, possibly by developing earlier in susceptible children, this would be a matter of considerable public health concern," he said.

The study points to wide regional variations in childhood diabetes. The annual rate of new cases per 100,000 in Scotland is 20, with only 6.8 in the Irish Republic. People living in colder climates are more susceptible to diabetes, although the reason is unclear.

The British Diabetic Association, which backed the study, said it was thought that environmental or genetic factors lay behind the rise.

A sugar-rich diet is a known cause of the disorder in adults, but it is thought to be less significant in childhood diabetes, in which insulin-making cells in the pancreas are attacked, possibly by a virus.

**Steps Against Mad Cow Disease**

91WE0279 London *THE DAILY TELEGRAPH*  
in English 16 Feb 91 p 10

[Text] Cattle which contract mad cow disease will be incinerated instead of buried from this summer the Ministry of Agriculture said yesterday.

Scientists are worried that burial creates an underground reservoir of the agent which causes the incurable brain disease bovine spongiform encephalopathy, which has killed 23,705 cattle in Britain.

Compensation to farmers and disposal of the dead cattle has cost the taxpayer more than L18 million since August, 1988, nearly L1,000 a cow.

Tests have shown that the agent, similar to that which causes scrapie in sheep and Creutzfeldt-Jakob disease in people, is extremely tough and cannot be killed by normal methods of disinfection.

In an experiment carried out by Dr. Paul Brown, an American scientist at the National Institute of Neurological Disorders and Strokes at Bethesda, Maryland, it was found that a strain of scrapie from dead hamsters survived for three years after being buried in his garden.



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